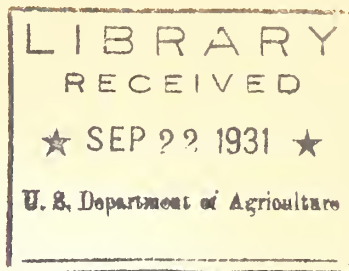


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STEM RUST AND BARBERRY NEWS

Issued by

Division of Barberry Eradication

Volume II

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Number 9.

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Bureau of Plant Industry  
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EPIDEMIOLOGY

(Reported by Dr. E. C. Stakman)

The season for field work in epidemiology is drawing to a temporary close. Mr. Butler and Mr. Uckelberg have completed their observations in the upper Mississippi Valley and the data are being summarized. Mr. Butler left for Texas and is making observations on the way. He will make a careful study of the rust conditions in Texas during the late summer and early fall in order to ascertain how much uredinial material goes into the winter. He will also make studies of the spore content of the air during the cataclysmic air disturbances known as northerers. The object is to find out to what extent urediniospores are blown from the North to the South in the fall. The results will be correlated with a fall physiologic form survey to be made in Texas and the Northern States.

The regular physiologic form survey is progressing far more rapidly now than a few weeks ago. It is not nearly so hot and the identifications can therefore be made to far better advantage. Mr. Uckelberg will assist in attempting to correlate his field observations with the results of the survey, and it is hoped that some significant data will be obtained.

The slides exposed from airplanes and from the ground at various places during the summer are being examined as rapidly as possible. Until the examination is complete and the data have been analyzed, final conclusions cannot be drawn.

As a special feature of the rust survey, a number of collections from barberries already have been identified, and several more are now being put through the series of "sieves" which are necessary in order to separate forms and decide finally what came from the barberry. The preliminary indications are that some very interesting parasitic strains may have been produced on the bushes this spring. The final story, however, cannot be written for several months, as it requires considerable time to unravel definitely the various combinations. (August 22)

EASTERN REGIONOhio - 8 East Broad Street, Columbus - Harry Atwood

During the week of August 17 the writer visited several nurseries in different sections of Ohio with Mr. Ames, who was here for the purpose of inspecting these nurseries and to arrange for the granting of permits for the interstate shipment of barberries.

A relatively small percentage of nurseries were found growing rust susceptible varieties of barberries. Those who had varieties which disseminate rust were found ready and willing to destroy them. All the nurserymen interviewed expressed a desire to cooperate with the Department in its efforts to eliminate black stem rust. They also were glad for information relative to rust resistant and hardy varieties of barberries which may be propagated and distributed.

Second survey has been completed in Logan County and all squads have moved to Shelby County. At present two squads of six men each and one squad of four men are engaged in second survey in rural sections of that county. The territory is generally open, clean cultivation is practiced and the topography of the land is level, all of which make for the rapid progress of survey.

Two scouts are engaged in checking on barberry leads which have come into the office during the past year. In addition to the removal of the reported bushes, several other locations have been found by the men and removed while on this work.

Indiana - Purdue Experiment Station Annex, West Lafayette - Wayne E. Leer

The systematic survey of Johnson County should be completed within a week or ten days.

One of the field men, Lawrence W. Wright, who resigned August 1, located a new and rather extensive area of escaped bushes while on vacation in Elkhart County. While it is always interesting to find new areas of escaped bushes, this particular find was of more than average importance. The home of the Assistant County Agent Leader is located about two miles south of these bushes. Early in July he spent several days at his home helping shock wheat, and when he returned he reported the heaviest stem rust in this community that he had seen. He felt that there would be damage running as high as 15 or 20 per cent in this community. The bushes that



were found by Mr. Wright probably explain the presence of this epidemic in Elkhart County.

Mr. Popham spent a few hours in the office Monday, August 17.

Form letters to rural route box holders in Decatur County were sent out immediately following the completion of the work in that county. In these letters attention was called to the fact that the survey of Decatur County had been completed and emphasized the fact that this did not mean that the common barberry had been entirely eliminated from Decatur County.

The cooperation received by the field men working in Decatur and Johnson Counties this year has been splendid. It was feared at the beginning of the season that the depression might cause criticism of the work, however, this has not been found true. The field men report the very best of interest and cooperation this year. (August 22).

#### Illinois - Post Office Building, Urbana - Robert W. Bills

Rapid progress has been made in the survey for common barberry bushes in Ogle, Kane, DuPage, and Lake Counties. By the end of the season, all of these counties will be completed.

The escaped area at Galena is being resurveyed to keep down fruiting bushes. Mr. Davis, who is in charge of the resurvey, has destroyed approximately 1,000 bushes. A few of the bushes had started bearing fruit apparently for the first year. This has been one of the worst escaped areas in Illinois, because of the large number of bushes which had originated from the hedge planted in Galena in 1844 and the difficulty of surveying in the rocky, unglaciated hills. The number of bushes has been greatly reduced as a result of past work. The program of resurveying every three or four years is preventing fruit production and further spread. The completion of that area should be attained in the near future.

The city survey of Aurora (population 46,589) and Batavia (population 5,045) was completed by Mr. Turner. Bushes were found on 49 properties in Aurora and 10 in Batavia. Few bushes have been found in the rural sections of Kane County away from the Fox River.

Mr. Matheny's squad in Lake County had destroyed 2,034 bushes up to August 12. Bushes are found and destroyed practically every day.

The work in DuPage County has been delayed because of the number of the Chicago suburbs which have large plantings of shrubbery. Mr. Barnes' squad has completed the northeast quarter, working out of Elmhurst and has moved to West Chicago. Mr. Woods' squad is almost through with the work in the southeast quarter near Downers Grove and will move to Naperville next week.

Mr. Davis will attend the State Fair August 24 to 29. He will address the 4-H Club Camp, the Boys' State Fair School, and the Eagle Scouts.

Black stem rust is being found on redtop in the vicinity of rusted barberry bushes. It seems to be heavier and farther advanced than in other regions removed from barberry areas.

The leader revisited the Edwin Glass farm near Belvidere, Boone County, on August 19. This is the location at which a severe spread of rust was found on barley near the large bush in 1926. The bush was killed with salt and no sprouts have appeared. The renter stated that he had some rust again this year, but it was no heavier than the rust on any of the other farms in that vicinity. (August 22).

#### Michigan - Michigan State College, East Lansing - Francis B. Powers

The barberry eradication demonstration at the Ionia County Free Fair, August 17 to 22, attracted the attention of approximately 25,000 people. Ten barberry locations believed to be authentic were reported. The demonstration is at the Upper Peninsula State Fair at Escanaba for the week of August 24.

The office at East Lansing has just completed sending letters, some with the new "Dangerous Neighbors" folders and others with 1544 bulletins, to 22,000 box holders in communities being worked this summer.

The Leader returned August 11 from a tour in which he demonstrated and spoke to a sectional 4-H Club group of 375 at Chatham in the upper peninsula, a farmers' round-up of 250 at the



Upper Peninsula Experimental Station, and to the North Central Sectional 4-H Club group of 350 at Gaylord in the lower peninsula. He also inspected the work of the squad located in the upper peninsula.

During the past week the Leader assisted with the demonstration at the Ionia Free Fair.

On August 24 an envelope containing barberry leaves with new aecial infection was received from squad leader Harry S. Hunter, of the upper peninsula. Mr. Hunter says that there is apparently a new crop of aecia in the vicinity of Marquette. (August 24).

Wisconsin - State Capitol Annex, Madison, Wis. - Vern O. Taylor

The squad which was doing second survey work in Grant County was moved to an area of escaped bushes at Marshall in Dane County, and in the short period of two weeks they have salted more than 1,000 bushes. These bushes were fruiting heavily and are on the border of the area. The center of the infested area can easily be worked with local labor as it will require group scouting, and the handling of quantities of salt.

A demonstration set up by the crew at Spring Green resulted in the finding of over 3,000 bushes and seedlings. The leads were obtained from farmers who recognized the characteristics of the bush on exhibit and asked the scouts to visit their farms. The same demonstration was transported to the Grant County fair held at Lancaster, and while the exhibit drew considerable attention, no leads have been secured to date.

The local labor squads are now working near Sauk City in Dane County and are finding bushes continually. These two squads have covered approximately 118 square miles up to this time, and much of it has been difficult scouting. They have also encountered territory which was very open and their work where the squad was divided proved entirely satisfactory.

More than 2,000 barberries have been destroyed at Green Lake in Green Lake County, and they continue to find bushes each day. (August 26)

WESTERN REGIONMinnesota - University Farm, St. Paul - Leonard W. Melander

The barberry field work in Minnesota has been progressing as rapidly as the territory will permit. The field force is centering its attention on the more open type of territory just now. The large woods with dense underbrush are being left for the fall when other plants have lost their leaves.

The dry weather the last two years has prevented extensive survival of seedlings. This aids in keeping areas of escaped bushes under control. In southeastern Minnesota the drouth has killed much of the undergrowth. On gravel morains the past two seasons' drouth has killed large trees of various kinds, especially oaks. The killing off of herbacious undergrowth by drouth makes scouting for barberries easier.

The County Fair season is in full swing. We are holding demonstrations at several this year. Our barberry demonstration is new. The slogan is "Train your guns on common barberry, the spreader of black stem rust." Mr. George prepared four cut-outs of hunters (full height) in an aiming position. A common barberry is placed in the back of the booth directly under the slogan. This centers the attention of the people on the common barberry (August 21).

Iowa - Morrill Hall, Iowa State College, Ames - D. R. Shepherd

The Iowa Office plans to continue survey work late this fall with five field men. At the present time we have eighteen men employed in four counties. The work has been discontinued in Webster County because of the large area of timber which it is planned to work out either late this fall or early next spring. From all indications now the survey work in Plymouth, Woodbury, Carroll and Greene Counties will be completed. A total of 3192 bushes and 2407 seedlings has been found so far this season on 200 different properties.

The intensive informational program will be continued this fall in two counties in eastern Iowa. Under this intensive informational work an agent visits each school in the county and talks to the pupils concerning the barberry eradication work. Informational activities will be carried on similar to the method used last spring where each school is organized into a rust busters club. More than 800 bushes

and 2300 seedlings were found on 46 properties in one of our eastern counties this spring as a result of this informational work.

The Iowa fair exhibit is now complete and ready to show at the Waterloo Dairy Cattle Congress and a large county fair at Spencer, Iowa. It is probable that we will have a barberry demonstration at two other county fairs. The central idea in our demonstration this year is "Why Eradicate Iowa Barberries?" (August 20)

District No. 1 - Post Office Building, Fargo, N. Dak.- George C. Mayoue

Montana and North Dakota - A ten day tour behind, District Leader Mayoue returned to Fargo August 16 after having conferred with Collaborator Morris and Assistant Leader Twilde at Bozeman and visited field men working at Kalispell, Rollins, and Missoula. Hurrying through the parched eastern section, Mr. Mayoue spent all his time in western Montana.

Within a "greenhorn's" guess of walking distance to Glacier Park peaks he found one of his squads living in a mountain cabin, eating at a near-by farm house, washing in a lake --- yes, and scouting for barberries. No worry there about early to work, found he -- they breakfast at six.

Pleased with the survey results he had found in Montana, Leader Mayoue went to his headquarters at the State College Monday following his return. Touring instincts had bettered the office, and it, too, was on wheels. In a large commercial van and small Government truck went supplies, furniture and itinerant Mayoue to Room 208 of Fargo's new \$600,000 Post Office Building. A few hours later he sat in his new office, working for better quality wheat, oats, barley and rye. Across the hall worked the forces opposed to the improper use of barley and rye. The sign on the door reads, "Prohibition."

To Postmaster Hugh E. Corrigan and Assistant Custodian Ehdlund, Leader Mayoue expressed his thanks for the cooperation that had facilitated the moving with little loss of time. Helpful before had been Assistant Postmaster Riess. To them, too, were the movers thankful for the basement storage room handily located next to the elevator.

On moving day, too, came Minnesota's Assistant Leader Hanson



to return with an "epidemiology" truck and load of uredinial infected wheat bundles. Picked and dried by Agent Tyler, the stalks are to be used for specimen samples.

Back in the wooded hills of western Dickey County lives one-time Government geologist and long time Dakota Indian authority, T. R. Shimmin. On his ranch are many Indian collections, "telephone" pigs (farmer-paid rentals to Shimmin-owned community telephone line), and Shimmin resort, popular spot for Dickey County Sunday-ers. To talk to them have come such men as Senator Gerald P. Nye and State Commissioner of Agriculture Joseph Kitchen. To talk last Sunday went Dickey raised Barberry Scout Don Lawrence, now working in the community. Barberry-wise returned the Sunday picnickers. (Reported by Joyce O. Roberts).

District No. 2, State College Station, Brookings, S. Dak.- R.O. Bulger

The squad of barberry men who were surveying Valley County, Nebraska, have finished the survey and have moved into Polk and Cass Counties with the other field men.

Mr. Yount has completed his round of club camps, which demanded a large share of his July time. A more detailed report of this work will follow in a later report.

South Dakota field men have finished the survey of Edmunds, Faulk, Hand and Hyde Counties, and have moved into Kingsbury, Lake, Moody and Roberts Counties in the eastern part of the State to carry on resurvey work. Escaped barberries have been found in all of the latter counties since the men entered.

On August 22 a total of 11 scouts in this district will resign. Two South Dakota agents tendered resignations effective July 31. On September 5 the remaining Nebraska field men will resign and on the same date only four South Dakota men will be left to continue survey work during September. This plan leaves some funds for spring work and provides for a fairly adequate educational program during the winter months.

Plans are under way for demonstration booths at the Tri-State Fair at Aberdeen, S. D., the South Dakota State Fair at Huron, and the Nebraska State Fair at Lincoln (August 18).

District No. 3, Agricultural College, Ft. Collins, Colo., E. A. Lungren